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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,069	03/01/2002	Lynn G. Hilden	P56668	9121
7590	03/30/2004		EXAMINER	
Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005			BEHREND, HARVEY E	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>10/085069</b>	Applicant(s) <b>Hilden</b> Examiner <b>Brennan</b>
		Group Art Unit <b>3641</b>
<i>—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—</i>		
<b>Period for Reply</b>		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<p>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</p> <p>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</p> <p>- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.</p> <p>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</p>		
<b>Status</b>		
<p><input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>7/3/03</u></p> <p><input type="checkbox"/> This action is FINAL.</p> <p><input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11; 453 O.G. 213.</p>		
<b>Disposition of Claims</b>		
<p><input checked="" type="checkbox"/> Claim(s) <u>1-35</u> is/are pending in the application.</p> <p><input type="checkbox"/> Of the above claim(s) <u>1-32</u> is/are withdrawn from consideration.</p> <p><input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p><input checked="" type="checkbox"/> Claim(s) <u>33-35</u> is/are rejected.</p> <p><input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p><input type="checkbox"/> Claim(s) _____ are subject to restriction or election requirement.</p>		
<b>Application Papers</b>		
<p><input type="checkbox"/> See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.</p> <p><input type="checkbox"/> The proposed drawing correction, filed on _____ is <input type="checkbox"/> approved <input type="checkbox"/> disapproved.</p> <p><input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.</p> <p><input type="checkbox"/> The specification is objected to by the Examiner.</p> <p><input type="checkbox"/> The oath or declaration is objected to by the Examiner.</p>		
<b>Priority under 35 U.S.C. § 119 (a)-(d)</b>		
<p><input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).</p> <p><input type="checkbox"/> All <input type="checkbox"/> Some* <input type="checkbox"/> None of the CERTIFIED copies of the priority documents have been received.</p> <p><input type="checkbox"/> received in Application No. (Series Code/Serial Number) _____</p> <p><input type="checkbox"/> received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</p>		
<p>*Certified copies not received: _____</p>		
<b>Attachment(s)</b>		
<p><input type="checkbox"/> Information Disclosure Statement(s), PTO-1449, Paper No(s). _____</p> <p><input checked="" type="checkbox"/> Notice of Reference(s) Cited, PTO-892</p> <p><input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review, PTO-948</p> <p><input type="checkbox"/> Interview Summary, PTO-413</p> <p><input type="checkbox"/> Notice of Informal Patent Application, PTO-152</p> <p><input type="checkbox"/> Other _____</p>		
<b>Office Action Summary</b>		

1. Applicants election with traverse in the 7/3/03 response of specie I (semi-flexible tubing as in Fig. 3), and wherein a first end of the semi-flexible tubing is connected to a PP end fitting absent any transfer manifold and wherein the second end of the semi-flexible tubing is connected to a three port manifold wherein the other two ports have a standard LE end fitting and a standard HE end fitting respectively, is acknowledged

Applicants arguments have been considered however, they are unpersuasive.

Initially, it is to be noted that it is impossible for an election of species requirement to ignore and destroy "Applicant's novel concept".

The election of species requirement in the present case is based on the alternative transfer line configurations disclosed and claimed.

On page 7 of the 7/3/03 response, applicant states the examiner failed to comply with MPEP 808.02 by failing to show (A) separate classification of the species, (B) separate status in the art if classifiable together, or (C) a different field of search for the species.

MPEP 808.02 does not apply in the present case as MPEP 808.02 is specific to "related inventions".

In the present case, the species in each Group as set forth by the examiner, are alternatives to one another and, they are independent inventions.

MPEP 808.01(a) is specific to "species". Said MPEP 808.01(a) states in part: "Since the claims are directed to independent inventions, restriction is proper pursuant to 35 U.S.C. 121, and it is not necessary to show a separate status in the art or separate classification.

A single disclosed species must be elected as a pre-requisite to applying the provisions of 37 CFR 1.141 to additional species if a generic claim is allowed."

As indicated even by applicants Remarks section of the 7/3/03 response, applicants claimed transfer line system can have myriad alternative configurations dependent on whether each of the ends are connected directly to an end fitting (such as a PP, standard loaded LE or standard loaded HE end fitting) or, to a two-port, or a three-port or a four-port transfer manifold (and the myriad alternative end fittings that can be positioned in each of said ports).

The search of each of said myriad alternative configurations, in addition to the examination of each of said myriad alternative configurations, would place an undue burden on the examiner.

It is not clear from applicants arguments as to whether or not applicant is stating that the presence or absence of transfer manifolds and the particular type of end fittings utilized in each end of the transfer line or each port of the transfer manifold, are obvious variants of one another (note particularly pages 4 and 5 of the 7/3/03 response wherein applicant indicate that the presence or absence of transfer manifolds and the types of end fittings utilized, are not separate embodiments).

Accordingly, if applicant would admit on the record that the species within a particular grouping are obvious variants of one another, the election of species requirement in regard to that particular grouping will be withdrawn (note section 6 of the 5/30/03 Office action).

On page 3 of the 7/3/03 response, applicant lists claims 1-5, 8-10, 23-26, 29-30, 33-35 as readable on each of applicants elected species.

The examiner does not agree because each of independent claims 1 and 23 recite the presence of two transfer manifolds, one on each end of the transfer line.

As indicated at the bottom of page 2 of the 7/3/03 response, applicants election is one end of the transfer line being connected to a standard HE end fitting with said standard HE end fitting being lodged in a three port manifold and, the other end of the transfer line being connected to a PP end fitting absent any transfer manifold.

Accordingly, it is determined that claims 33-35 read on each of the elected species.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague, indefinite and incomplete, particularly as to what all materials or compositions, are meant by and to be encompassed by, the term "rapid deflagration cord". The metes and bounds of the claims are hence undefined.

There are generally transfer lines which use explosives to produce a shock wave and, transfer lines which use low explosives classified as, "mild detonating or rapid

deflagration materials" (e.g. see Hadden in col. 4 lines 3-13, Alchorn et al in col. 2 lines 28-31 and Menzel et al in col. 3 lines 1-4 and col. 4 lines 37-40).

Applicants specification however, appears to make a distinction between rapid deflagration materials and mild detonating materials, but, fails to state specifically what said distinction is.

In this same respect, note MPEP 2173.05 (u) which states:

"If the trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name.

If a trademark or trade name appears in a claim and is not intended as a limitation in the claim, the question of why it is in the claim should be addressed. Does its presence in the claim cause confusion as to the scope of the claim? If so, the claim should be rejected under 35 U.S.C. 112, second paragraph."

4. Claims 33-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There is no adequate description nor enabling disclosure of what all materials are meant by and are encompassed by the term "rapid deflagration cord" and, the distinctions (if any) between rapid deflagration materials and mild detonating materials. Note also, the discussion of this issue in section 3 above.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alchron et al in view of either Hadden or Smith.

In Alchron et al, the rapid deflagration cord reads on deflagrating material 16 (col. 2 lines 28-31). The first metal tubing reads on either of metal bellows 18 or flexible metal sheath 20 (bellows 18 is impervious to gas (col. 2 line 64- col. 3 lines 1+) and, sheath 20 has the functions of resisting pressure generated by the function of the deflagrating material 16, assuring complete containment of the detonation products and assuring a completely sealed system (col. 3 line 63 – col. 4 line 8)).

Each of the two end fittings 22 are welded to each of the bellows 18 and sheath 20 by weld 38 (see the drawing, col. 1 lines 52-56, col. 4 lines 32+). Col. 2 lines 32+ state that the end fittings 22 include a booster charge 32 (see the drawing) but fails to

show details as to how it is connected nor, does it show an annular sealing material as recited in claim 35.

The secondary references each show it is conventional as well as advantageous in the art to have this booster charge be contained in a closure cup having a rim welded to the ferrule and, to so modify the primary reference would accordingly have been *prima facie* obvious (note for example, Smith in Fig. 1 which shows closure or booster cup 9 welded to ferrule 12 at weld 21 (see also col. 2 line 65 – col. 3 line 36) and, Hadden in Fig. 2 and col. 4 lines 57-61 which shows cup 40 attached to portion 20 of ferrule 12 by welding).

Hadden shows it is old and advantageous to provide an annular sealing bushing 56 for providing a seal when the end fitting is positioned in the connecting device of Fig. 4 (see also col. 5 lines 14-26).

Smith shows it is old and advantageous to provide an annular sealing material attached to ferrule 12 (see e.g. Fig. 1 and col. 3 lines 37+), which provides a hermetic seal for the loaded end fitting at all times (whether or not it is installed in a transfer manifold).

Accordingly, it would have been *prima facie* obvious to have modified the primary reference by providing an annular seal means attached to the ferrule for hermetically sealing the loaded end fitting, as shown to be old and advantageous in the art by the above referenced teachings of either Hadden or Smith.

7. The other references cited further illustrate pertinent art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is (703) 305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

Behrend/vs  
March 10, 2004



HARVEY E. BEHREND  
PRIMARY EXAMINER